What is claimed is:

1. A head drum assembly for a tape recorder, comprising:

a rotary drum supporting a magnetic head thereon, and being rotatably disposed on a shaft;

a stationary drum and a drum cover secured to the shaft to be positioned vertically on lower and upper parts of the rotary drum with the rotary drum being interposed therebetween;

a sub circuit board, a stationary transformer and a rotary transformer, each being disposed between the stationary drum and the rotary drum for signal transmission with the magnetic head;

a motor stator mounted on the stationary drum; and

a motor rotor disposed in the rotary drum to oppose the motor stator and rotate, wherein

the drum cover is formed of a conductive material and press-fitted on the shaft, and a connecting member is disposed on the conductive body of the drum cover for supporting and electrically connecting the sub circuit board with the conductive body.

2. The head drum assembly of claim 1, wherein the drum cover is formed of the same material as that of the rotary drum and the stationary drum.

3. The head drum assembly of claim 1, wherein the connecting member is a screw fastened to coupling holes which are respectively formed in the drum cover and in the sub circuit board to correspond to each other.

4. The head drum assembly of claim 1, wherein the rotary drum has a linking hole vertically penetrating therein, and a coil of the rotary transformer is passed through the linking hole and directly connected to the magnetic head by soldering.

5. The head drum assembly of claim 4, wherein an entry part and an exit part at the upper and the lower parts of the linking hole are rounded.

6. The head drum assembly of claim 4, wherein the linking hole is formed symmetrically with respect to the magnetic head.

7. The head drum assembly of claim 4, wherein the motor stator is formed in a two-layered structure having a lower substrate and an upper substrate stacked on the lower substrate, and combinations of a torque generation coil pattern, a frequency generation coil pattern for speed control and a phase generation coil pattern for phase control are formed on the upper and the lower substrates, respectively.

8. The head drum assembly of claim 7, wherein the torque generation coil pattern is formed dispersely on the upper and the lower substrates, and the phase generation coil pattern for phase control is formed on one of the upper and the lower substrates and the frequency generation coil pattern for speed control is formed on the other.

9. The head drum assembly of claim 7, wherein the torque generation coil pattern and the phase generation coil pattern are formed dispersely on the

upper and the lower substrates, and the frequency generation coil pattern is formed on the upper substrate.

10. The head drum assembly of claim 7, wherein each of the upper and the lower substrates has a copper layer in a predetermined pattern which is formed on a base plate, and a protective layer formed on the copper layer, and the copper layers of the upper and the lower substrates are connected with each other through a passing hole formed in the upper substrate.

11. The head drum assembly of claim 10, wherein the copper layer is formed in width from about 10 μm to about 20 μm, and a pitch between the respective copper layers ranges from about 90 μm to about 100 μm.

12. The head drum assembly of claim 1, wherein the motor stator is formed in a two-layered structure having a lower substrate and an upper substrate stacked on the lower substrate, and combinations of a torque generation coil pattern, a frequency generation coil pattern for speed control and a phase generation coil pattern for phase control are formed on the upper and the lower substrates, respectively.

13. The head drum assembly of claim 12, wherein the torque generation coil pattern is formed dispersely on the upper and the lower substrates, and the phase generation coil pattern for phase control is formed on one of the upper and the lower substrates and the frequency generation coil pattern for speed control is formed on the other.

14. The head drum assembly of claim 12, wherein the torque generation coil pattern and the phase generation coil pattern are formed dispersely on the upper and the lower substrates, and the frequency generation coil pattern is formed on the upper substrate.

15. The head drum assembly of claim 12, wherein each of the upper and the lower substrates has a copper layer in a predetermined pattern which is formed on a base plate, and a protective layer formed on the copper layer, and the copper layers of the upper and the lower substrates are connected with each other through a passing hole formed in the upper substrate.

16. The head drum assembly of claim 15, wherein the copper layer is formed in width from about 10 μm to about 20 μm, and a pitch between the respective copper layers ranges from about 90 μm to about 100 μm.

17. A head drum assembly for a magnetic recording/reproducing apparatus, comprising:

a rotary drum supporting a magnetic head thereon, and being rotatably disposed on a shaft; and

a rotary transformer disposed on the rotary drum, wherein

the rotary drum has a linking hole vertically penetrating therein, and a coil of the rotary transformer is passed through the linking hole to be directly connected to the magnetic head by soldering.

18. The head drum assembly of claim 17, wherein an entry part and an exit part at the upper and the lower parts of the linking hole are rounded.

19. The head drum assembly of claim 17, wherein the linking hole is formed symmetrically with respect to the magnetic head.

20. The head drum assembly of claim 17, further comprising:

a stationary drum which is positioned below the rotary drum and attached to the shaft; and

a motor rotor and a motor stator disposed above and below the rotary drum and above the stationary drum, respectively,

wherein the motor stator is formed in a two-layered structure having a lower substrate and an upper substrate stacked on the lower substrate, and combinations of a torque generation coil pattern, a frequency generation coil pattern for speed control and a phase generation coil pattern for phase control are formed on the upper and the lower substrates, respectively.

21. The head drum assembly of claim 20, wherein the torque generation coil pattern is formed dispersely on the upper and the lower substrates, and the phase generation coil pattern for phase control is formed on one of the upper and the lower substrates and the frequency generation coil pattern for speed control is formed on the other.

22. The head drum assembly of claim 20, wherein the torque generation coil pattern and the phase generation coil pattern are formed dispersely on the upper and the lower substrates, and the frequency generation coil pattern is formed on the upper substrate.

23. The head drum assembly of claim 20, wherein each of the upper and the lower substrates has a copper layer in a predetermined pattern which is formed on a base plate, and a protective layer formed on the copper layer, and the copper layers of the upper and the lower substrates are connected with each other through a passing hole formed in the upper substrate.

24. The head drum assembly of claim 23, wherein the copper layer is formed in width from about 10 μm to about 20 μm, and a pitch between the respective copper layers ranges from about 90 μm to about 100 μm.

25. A head drum assembly for a tape recorder, comprising:

a rotary drum and a stationary drum press-fitted to upper and lower parts of a shaft, respectively; and

a motor rotor attached to the rotary drum to oppose a motor stator which is disposed on the stationary drum and rotate,

wherein the motor stator is formed in a two-layered structure having a lower substrate and an upper substrate stacked on the lower substrate, and combinations of a torque generation coil pattern, a frequency generation coil pattern for speed control and a phase generation coil pattern for phase control are formed on the upper and the lower substrates, respectively.

26. The head drum assembly of claim 25, wherein the torque generation coil pattern is formed dispersely on the upper and the lower substrates, and the phase generation coil pattern for phase control is formed on one of the upper and the lower substrates and the frequency generation coil pattern for speed control is formed on the other.

27. The head drum assembly of claim 25, wherein the torque generation coil pattern and the phase generation coil pattern are formed dispersely on the upper and the lower substrates, and the frequency generation coil pattern is formed on the upper substrate.

28. The head drum assembly of claim 25, wherein each of the upper and the lower substrates has a copper layer in a predetermined pattern which is formed on a base plate, and a protective layer formed on the copper layer, and the copper layers of the upper and the lower substrates are connected with each other through a passing hole formed in the upper substrate.

29. The head drum assembly of claim 28, wherein the copper layer is formed in width from about 10 μm to about 20 μm, and a pitch between the respective copper layers ranges from about 90 μm to about 100 μm.